

## ABSTRACT

A superconducting coil assembly is of the type mounted to a rotor assembly of an electric rotating machine and, in operation, is maintained at cryogenic temperatures while the portion of the rotor assembly is maintained above cryogenic temperatures. The superconducting coil assembly includes at least one superconducting winding wound about a longitudinal axis of the coil assembly and having an inner radial surface defining a bore extending through the coil assembly. The coil assembly also includes at least one support member extending across the bore and mechanically coupled to the portion of the rotor assembly and to opposing portions of the inner radial surface of the at least one superconducting winding.

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